

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising the steps of:  
forming an insulating film comprising silicon oxide over a glass substrate,  
wherein the insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less which are detected by ~~secondary ion mass spectroscopy~~.
2. (Previously Presented) A method according to claim 1, wherein the halogen is chlorine.
3. (Previously Presented) A method according to claim 1, wherein the insulating film includes carbon at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or less which is detected by the secondary ion mass spectroscopy.
4. (Original) A method according to claim 1, wherein said insulating film is a gate insulating film.
5. (Original) A method according to claim 1, wherein the insulating film is an insulating film in a thin film transistor.
6. (Original) A method according to claim 1, wherein the insulating film covers an even surface over the glass substrate.

7. (Original) A method according to claim 1, wherein the insulating film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

8. (Currently Amended) A method of producing a semiconductor device, said method comprising the steps of:

forming a crystalline semiconductor island formed over a glass substrate; and

forming an insulating film including silicon oxide formed to cover the crystalline semiconductor island,

wherein the insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

9. (Original) A method according to claim 8, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

10. (Previously Presented) A method according to claim 8, wherein the halogen is chlorine.

11. (Original) A method according to claim 8, wherein the insulating film is formed by plasma chemical vapor deposition using an organic silane.

12. (Original) A method according to claim 8, wherein the insulating film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

13. (Currently Amended) A method of fabricating a thin film transistor, said method comprising the steps of:

forming a crystalline semiconductor island formed over a glass substrate;

forming [[a]] an insulating film comprising silicon oxide film formed over the crystalline semiconductor island; and

forming a conductive film including at least one of aluminum, titanium, and titanium nitride, said conductive film being formed on the ~~silicon oxide insulating~~ film, wherein the ~~silicon oxide insulating~~ film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

14. (Previously Presented) A method according to claim 13, wherein the halogen is chlorine.

15. (Currently Amended) A method according to claim 13, wherein the ~~silicon oxide insulating~~ film is formed by plasma chemical vapor deposition using an organic silane.

16. (Currently Amended) A method according to claim 13, wherein the ~~silicon oxide insulating~~ film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

17. (Currently Amended) A method of fabricating a thin film transistor, said method comprising the steps of:

forming a crystalline semiconductor island formed over a glass substrate;

forming a gate insulating film including silicon oxide formed on the crystalline semiconductor island; and

forming a gate electrode formed on the insulating film,

wherein the gate insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

18. (Previously Presented) A method according to claim 17, wherein the halogen is chlorine.

19. (Original) A method according to claim 17, wherein the gate insulating film is formed by plasma chemical vapor deposition using an organic silane.

20. (Original) A method according to claim 17, wherein the gate insulating film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

21. (Previously Presented) A method according to claim 1, wherein the halogen is fluorine.

22. (Previously Presented) A method according to claim 8, wherein the halogen is fluorine.

23. (Previously Presented) A method according to claim 13, wherein the halogen is fluorine.

24. (Previously Presented) A method according to claim 17, wherein the halogen is fluorine.

25. (Previously Presented) A method of fabricating a thin film transistor, said method comprising the steps of:

forming at least a thin film transistor including a crystalline semiconductor island, a gate electrode adjacent to the crystalline semiconductor island with a gate insulating film interposed therebetween;

forming an interlayer insulating film comprising silicon oxide over the thin film transistor,

wherein the interlayer insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

26. (Previously Presented) A method according to claim 25, wherein the halogen is chlorine.

27. (Previously Presented) A method according to claim 25, wherein the halogen is fluorine.

28. (Previously Presented) A method according to claim 25, wherein the interlayer insulating film is formed by plasma chemical vapor deposition using an organic silane.

29. (Previously Presented) A method according to claim 25, wherein the interlayer insulating film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

30. (Previously Presented) A method of manufacturing a semiconductor device comprising:

forming a gate insulating film comprising silicon oxide on a channel region by plasma CVD using a reactive gas comprising at least an organic silane,

wherein said gate insulating film contains halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

31. (Previously Presented) A method of fabricating a semiconductor device, said method comprising the steps of:

forming an interlayer insulating film comprising silicon oxide over a transistor,

wherein the interlayer insulating film includes a halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

32. (Previously Presented) A method of fabricating a semiconductor device according to claim 31, wherein the halogen is chlorine.

33. (Previously Presented) A method of fabricating a semiconductor device according to claim 31 wherein the halogen is fluorine.

34. (Previously Presented) A method of fabricating a semiconductor device according to claim 31 wherein the interlayer insulating film is formed by plasma chemical vapor deposition using an organic silane.

35. (Previously Presented) A method of fabricating a semiconductor device according to claim 31 wherein the interlayer insulating film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

36. (Previously Presented) A method of fabricating a semiconductor device according to claim 31 wherein said transistor is a thin film transistor.

37. (New) A method according to claim 1 wherein the concentrations of halogen and carbon are detected by the secondary ion mass spectroscopy.

38. (New) A method according to claim 13, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

39. (New) A method according to claim 17, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

40. (New) A method according to claim 25, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

41. (New) A method according to claim 30, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

42. (New) A method according to claim 31, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.